



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:	10/522,851	)	Confirmation No. :	Not yet assigned
Applicant	: Lange, Daniel H.	)		
Filed	: Jan. 28, 2005	)		
TC/A.U.	: Not yet assigned	)		
Examiner	: Not yet assigned	)		
Docket No.	: 926267-100001US	)		
Customer No.	: 34026	)		

Commissioner for Patents  
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Alexandria, VA 22313-1450

**TRANSMITTAL OF INFORMATION DISCLOSURE**  
**STATEMENT UNDER 37 C.F.R. § 1.98**

Sir:

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- (1) Information Disclosure Statement Under 37 C.F.R. § 1.98;
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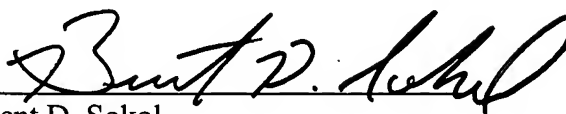
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*Boh Marchese*

It is believed no fee is due since the U.S. Patent & Trademark Office has not yet issued a first Office Action on the merits.

Respectfully submitted,

Dated: May 11, 2005

By:   
Brent D. Sokol  
Reg. No. 38,621

**CUSTOMER NO.: 34026**

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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

Sheet 1 of 7

*Complete if Known*

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**U.S. PATENT DOCUMENTS**

Examiner Initials	Cite No.	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA	US-4,685,465	08-11-1987	Klitgaard et al.	All
	AB	US-5,534,855	07-09-1996	Shockley et al.	col. 5, l. 36 – col. 6, l. 8 col. 6, ll. 21-66 col. 7, ll. 21-49 col. 8, ll. 35-59 col. 9, ll. 14-57
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	AN	US-6,367,016 B1	04-02-2002	Lambert et al.	All
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	AT	US-2002/0184500 A1	12-05-2002	Maritzen et al.	All
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	First Named Inventor	Lange, Daniel H.
	Art Unit	Not Yet Assigned
	Examiner Name	Not Yet Assigned
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	AV	US-2003/0023855 A1	01-30-2003	Keogh et al.	All
	AW	US-2003/0048000 A1	03-13-2003	Harter et al.	All
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	BC	US-6,633,090 B2	10-14-2003	Harter et al.	All
	BD	US-2004/0010724 A1	01-15-2004	Brown et al.	All
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	BG	US-2004/0108377 A1	06-10-2004	Rietveld	All

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Exam. Initials	Cite No.	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	Translation
	CA	WO 84/04815	12-06-1984	Klitgaard et al.	All	<input type="checkbox"/>
	CB	WO 07/15032	04-24-1997	Prima Officina Carte Valori Turati Lombardi e C. S.P.A.	All	<input type="checkbox"/>
	CC	WO 98/13791	04-02-1998	Westinghouse Electric Corporation	All	<input type="checkbox"/>
	CD	WO 00/65292	11-02-2000	Smith & Wesson Corp.	All	<input type="checkbox"/>
	CE	WO 00/70545	11-23-2000	Biolink Technologies International, Inc.	All	<input type="checkbox"/>

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	CF	EP 1 081 662 A2	03-07-2001	Oki Electric Industry Co., Ltd.	All	<input type="checkbox"/>
	CG	WO 01/49369 A1	07-12-2001	Medtronic, Inc.	All	<input type="checkbox"/>
	CH	EP 1 120 757 A2	08-01-2001	International Game Technology	All	<input type="checkbox"/>
	CI	WO 01/71642 A2	09-27-2001	Chormenky	All	<input type="checkbox"/>
	CJ	WO 02/21763 A1	03-14-2002	Mainstay Enterprises, Inc.	All	<input type="checkbox"/>
	CK	WO 02/27686 A1	04-04-2002	Sweatte	All	<input type="checkbox"/>
	CL	WO 02/057998 A1	07-25-2002	Nextgen ID	All	<input type="checkbox"/>
	CM	WO 02/084602 A1	10-24-2002	Van der Velden	All	<input type="checkbox"/>
	CN	WO 02/093330 A2	11-21-2002	Telefonaktiebolaget L M Ericsson	All	<input type="checkbox"/>
	CO	WO 02/098054 A1	12-05-2002	Sony Electronics Inc.	All	<input type="checkbox"/>
	CP	WO 03/009113 A1	01-30-2003	Direktgiro AB	All	<input type="checkbox"/>
	CQ	WO 03/029048 A2	04-10-2003	Snyder	All	<input type="checkbox"/>
	CR	WO 2004/010372 A1	01-29-2004	Banque-Tec International Pty Ltd	All	<input type="checkbox"/>
	CS	WO 2004/012388 A1	02-05-2004	McInnis	All	<input type="checkbox"/>
	CT	EP 1 418 486 A2	05-12-2004	Samsung Electronics Co., Ltd.	All	<input type="checkbox"/>
	CU	WO 2004/048947 A1	06-10-2004	CDEX, Inc.	All	<input type="checkbox"/>
	CV	WO 2004/057546 A2	07-08-2004	Motorola Inc.	All	<input type="checkbox"/>

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	DA	TOMPKINS, W.J., et al., "A Portable Microcomputer-Based System for Biomedical Applications," Biomedical Sciences Instrumentation, April 17-18, 1978, pp. 61-66, Vol. 14, RMBS-ISA, USA	
	DB	CHIEN, I.C., et al., "Computer Methods for Analysing the High-Frequency Electrocardiogram," Medical & Biological Engineering & Computing, May 1980, pp. 303-312, Vol. 18, No. 3, International Federation for Medical & Biological Engineering, England	
	DC	KIM, Y., et al., "Forward and Inverse High-Frequency Electrocardiography," Medical & Biological Engineering & Computing, Jan. 1981, pp. 11-22, Vol. 19, No. 1, International Federation for Medical & Biological Engineering, England	
	DD	ABENSTEIN, J.P., et al., "A New Data-Reduction Algorithm for Real-Time ECG Analysis," IEEE Transactions on Biomedical Engineering, Jan. 1982, pp. 43-48, Vol. BME-29, No. 1, IEEE Engineering in Medicine and Biology Society, University of Wisconsin, Madison, WI, USA	
	DE	THAKOR, N.V., et al., "A Battery-Powered Digital Modem for Telephone Transmission of ECG Data," IEEE Transactions on Biomedical Engineering, May 1982, pp. 355-359, Vol. BME-29, No. 5, IEEE Engineering in Medicine and Biology Society, University of Wisconsin, Madison, WI, USA	
	DF	TOMPKINS, W.J., "Trends in Ambulatory Electrocardiography," IEEE Transactions on Biomedical Engineering, August 1982, p. 600, Vol. BME-29, No. 8, IEEE Engineering in Medicine and Biology Society, University of Wisconsin, Madison, WI, USA	
	DG	WEISNER, S.J., et al., "A Compact, Microprocessor-Based ECG ST-Segment Analyzer for the Operating Room," IEEE Transactions on Biomedical Engineering, Sept. 1982, pp. 642-649, Vol. BME-29, No. 9, IEEE Engineering in Medicine and Biology Society, University of Wisconsin, Madison, WI, USA	
	DH	SAHAKIAN, A.V., et al., "A Microprocessor-Based Arrhythmia Monitor/Recorder for the Operating and Recovery Rooms," Medical Instrumentation, March-April 1983, pp. 131-134, Vol. 17, No. 2, University of Wisconsin, Madison, WI, USA	
	DI	FURNO, G.S., et al., "A Learning Filter for Removing Noise Interference," IEEE Transactions on Biomedical Engineering, April 1983, pp. 31-34, Vol. BME-30, No. 4, IEEE Engineering in Medicine and Biology Society, University of Wisconsin, Madison, WI, USA	

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	DJ	GE, J., et al., "High-Frequency ECG Feature Recognition Using a High Level Language," Biomedical Sciences Instrumentation, April 18-19, 1983, pp. 31-34, Vol. 19, RMBS-ISA, USA	
	DK	THAKOR, N.V., et al., "Optimal QRS Detector," Medical & Biological Engineering & Computing, May 1983, pp. 343-350, Vol. 21, No. 3, Int'l Federation for Medical & Biological Engineering, England	
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	DM	THAKOR, N.V., et al., "Design, Implementation and Evaluation of a Microcomputer-Based Portable Arrhythmia Monitor," Medical & Biological Engineering & Computing, March 1984, pp. 151-159, Vol. 22, No. 2, Int'l Federation for Medical & Biological Engineering, England	
	DN	THAKOR, N.V., et al., "Estimation of QRS Complex Power Spectra for Design of a QRS Filter," IEEE Transactions on Biomedical Engineering, Nov. 1984, pp. 702-706, Vol. BME-31, No. 11, IEEE Engineering in Medicine and Biology Society, University of Wisconsin, Madison, WI, USA	
	DO	PAN, J., et al., "A Real-Time QRS Detection Algorithm," IEEE Transactions on Biomedical Engineering, March 1985, pp. 230-236, Vol. BME-32, No. 3, IEEE Engineering in Medicine and Biology Society, University of Wisconsin, Madison, WI, USA	
	DP	AHLSTROM, M.L., et al., "Digital Filters for Real-Time ECG Signal Processing Using Microprocessors," IEEE Transactions on Biomedical Engineering, Sept. 1985, pp. 708-713, Vol. BME-32, No. 9, IEEE Engineering in Medicine and Biology Society, University of Wisconsin, Madison, WI, USA	
	DQ	GE, J.G., et al., "High-Frequency Electrocardiogram Analyzer," IEEE Transactions on Biomedical Engineering, Dec. 1986, pp. 1137-1140, Vol. BME-33, No. 12, IEEE Engineering in Medicine and Biology Society, University of Wisconsin, Madison, WI, USA	
	DR	HAMILTON, P.S., et al., "Quantitative Investigation of QRS Detection Rules Using the MIT/BIH Arrhythmia Database," IEEE Transactions on Biomedical Engineering, Dec. 1986, pp. 1157-1165, Vol. BME-33, No. 12, IEEE Engineering in Medicine and Biology Society, University of Wisconsin, Madison, WI, USA	

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	DS	HAMILTON, P.S., et al., "Compression of the Ambulatory ECG by Average Beat Subtraction and Residual Differencing," IEEE Transactions on Biomedical Engineering, March 1991, pp. 253-259, Vol. 38, No. 3, Dept. of Electrical and Computer Engineering, University of Wisconsin, Madison, WI, USA	
	DT	HAMILTON, P.S., et al., "Theoretical and Experimental Rate Distortion Performance in Compression of Ambulatory ECG's," IEEE Transactions on Biomedical Engineering, March 1991, pp. 260-266, Vol. 38, No. 3, Dept. of Electrical and Computer Engineering, University of Wisconsin, Madison, WI, USA	
	DU	XUE, Q., et al., "Neural-Network-Based Adaptive Matched Filtering for QRS Detection," IEEE Transactions on Biomedical Engineering, April 1992, pp. 317-329, Vol. 39, No. 4, Dept. of Electrical and Computer Engineering, University of Wisconsin, Madison, WI, USA	
	DV	HU, Y.H., et al., "Applications of Artificial Neural Networks for ECG Signal Detection and Classification," Journal of Electrocardiology, 1993, pp. 66-73, Vol. 26 Supplement, Churchill Livingstone, Madison, WI, USA	
	DW	LUO, S., et al., "Parameter Evaluation of the Inverse Power-Law Spectrum of Heart Rate. A Quantitative Approach for ECG Arrhythmia Analysis," Journal of Electrocardiology, 1994, pp. 46-52, Vol. 27 Supplement, Churchill Livingstone, Madison, WI, USA	
	DX	PANESCU, D., et al., "A Database of Cardiac Arrhythmias," Academic Emergency Medicine, January 1995, pp. 46-49, Vol. 2, No. 1, University of Wisconsin, Madison, WI, USA	
	DY	AFONSO, V.X., et al., "Detecting Ventricular Fibrillation: Selecting the Appropriate Time-Frequency Analysis Tool for the Application," IEEE Engineering in Medicine & Biology, March/April 1995, pp. 152-159, Vol. 14, No. 2, USA	
	DZ	AFONSO, V.X., et al., "Comparing Stress ECG Enhancement Algorithms: With an Introduction to a Filter Bank Based Approach," IEEE Engineering in Medicine & Biology, May/June 1996, pp. 37-44, Vol. 15, No. 3, USA	
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	EB	AFONSO, V., et al., "Use of Filter Banks in ECG Processing," Biomedical Engineering - Applications, Basis & Communications, Oct. 25, 1997, pp. 297-302, Vol. 9, No. 5, Dept. of Electrical & Computer Engineering, University of Wisconsin, Madison, WI, USA	

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	EC	AFONSO, VALTINO X., et al., "ECG Beat Detection Using Filter Banks," IEEE Transactions on Biomedical Engineering, February 1999, pp. 192-202, Vol. 46, No. 2, Endocardial Solutions, Inc., Saint Paul, MN, USA	
	ED	WIEBEN, O., et al., "Classification of Premature Ventricular Complexes Using Filter Bank Features, Induction of Decision Trees and a Fuzzy Rule-Based System," Medical & Biological Engineering & Computing, Sept. 1999, pp. 560-565, Vol. 37, No. 5, Dept. of Electrical & Computer Engineering, University of Wisconsin, Madison, WI, USA	
	EE	KYOSO, MASAKI, et al., "Development of an ECG Identification System," Papers from 23 <sup>rd</sup> Annual Int'l Conference of the IEEE Engineering in Medicine and Biology Society, Oct. 25-28, 2001, Dept. of Information and Computer Sciences, Kanagawa Inst. of Technology, Istanbul, Turkey	
	EF	HARLAND, C.J., et al., "Electric potential probes--new directions in the remote sensing of the human body," Meas. Sci. Technol. (2002) 163-169, Vol. 13, IOP Publishing Ltd., UK	

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